

REMARKS

The rejection of Claims 20-32 as being unpatentable over Nell et al. in view of Yoshida under 35 U. S.C. §103(a) is traversed, and reconsideration is respectfully requested.

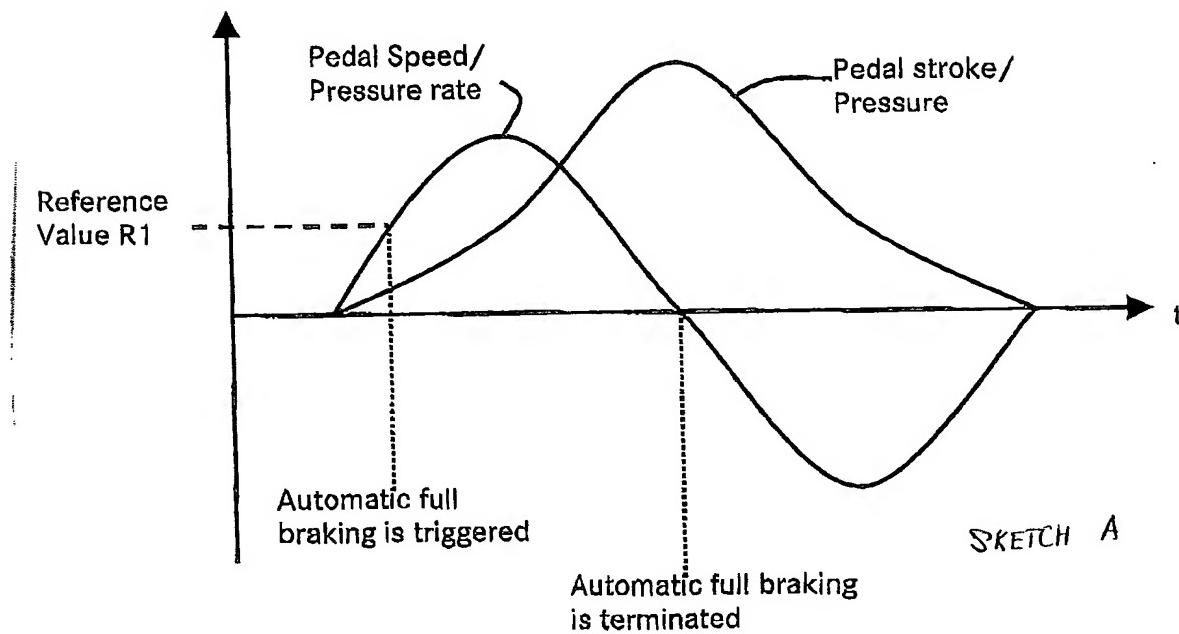
The Examiner is thanked for the courtesy of the interview with the undersigned on June 7, 2004, as accurately reflected in the Interview Summary prepared by the Examiner.

Although the final rejection asserted that the Yoshida patent teaches the use of a second threshold, that threshold is not one based upon pressure but upon stroke. Consequently, even if for argument's sake it could be maintained that the teachings of Yoshida et al. could be combined with those of Nell et al. without exercising impermissible hindsight, the resulting hypothetical brake system would not be one in which temporary brake activation takes place based upon the output of pressure sensors located in the brake circuits. That hypothetical systems would be one that employs a stroke amount threshold at best.

Applicants have proposed to amend Claim 20 to more clearly define the temporary activation feature. The Examiner is also thanked for the additional suggestion discussed in the interview and now reflected in Claim 20. The following is a summary of whether neither Nell et al. nor Yoshida, alone or in combination, teach or even suggest the claimed invention.

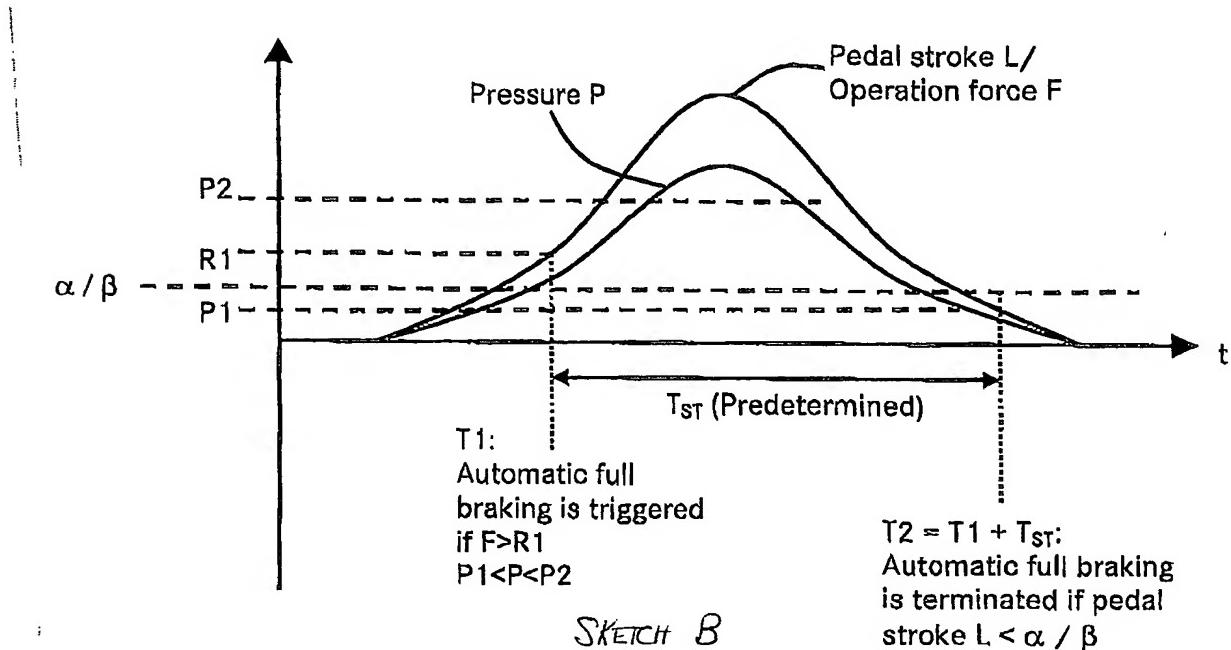
In Nell et al. automatic full braking is triggered if the pedal speed exceeds a first reference value (reference R1 in Sketch A below). The speed can either be

derived from the transmitter 69 or the pressure sensors 63, 64 (Col. 13, lines 13-26). The pressure sensors are assigned to different brake circuits, but only one pressure signal is taken into account in order to decide whether the reference value is exceeded or not. The sensor information of the further sensor merits provides redundancy (Col. 6, lines 20-25).



In Yoshida automatic full braking is triggered at a first point of time T1 if the operating force F exceeds a certain reference value (R1 in Sketch B below). At this first point in time, the pressure P of the master cylinder lies between a small pressure value P1 and a high pressure value P2 (Col. 13, lines 9-17, Fig. 3 and Fig. 5 or Fig. 6). The condition for triggering the automatic braking process is thus different from the present invention. As to the operation force, there is only one reference value R1 which is taken into consideration in the triggering

condition for the automatic braking process. Referring to the two pressure values P_1 and P_2 , the automatic braking process is triggered if the lower value P_1 is exceeded and the higher value P_2 is not attained which is the opposite of what occurs with the present invention.



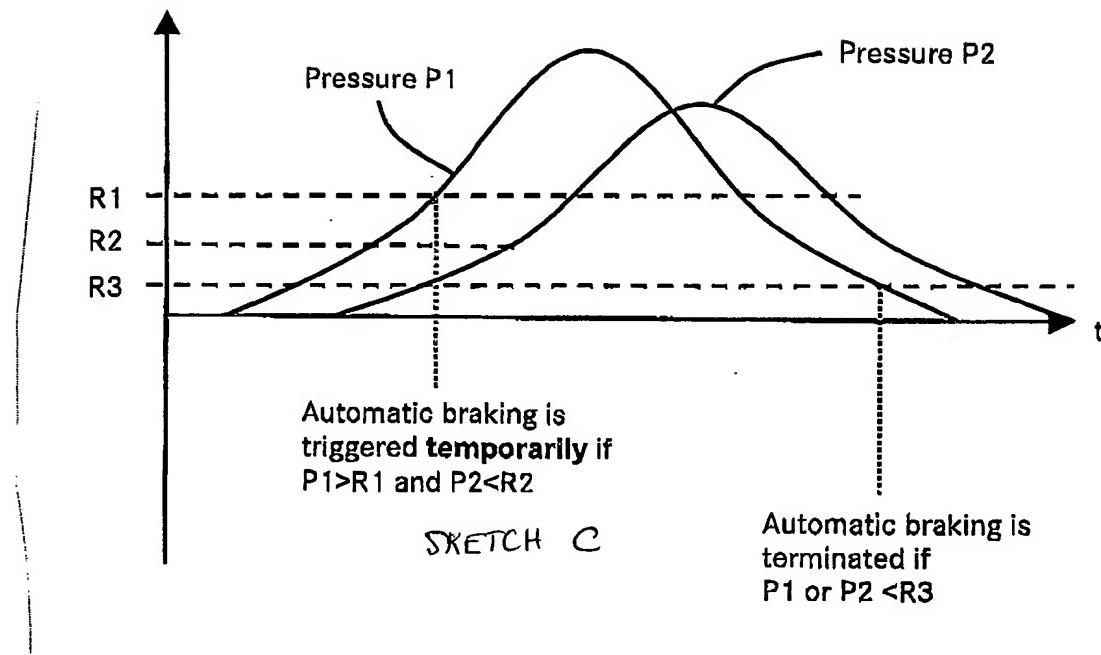
Although Yoshida discloses two pressure values, the criteria in the triggering condition is different. There is no hint in Yoshida, as is true in Nell et al. that the two pressure values are to be assigned to different pressure sensors. Yoshida also does not teach temporary activation of the automatic braking procedure because the braking process at the first point of time is either triggered or not. No temporary activation is provided. If the automatic braking procedure of Yoshida is triggered, it is maintained at least for a predetermined time period T_{st} . The condition whether the automatic braking procedure shall be terminated or not is checked only if the predetermined time period T_{st} has

termination condition (steps 116, or 116A of Fig. 5 and Fig. 6) is fulfilled, namely the pedal stroke falls below a reference value alpha or beta. A temporary activation which terminates independently from any termination condition is not suggested in Yoshida.

According to the present invention, the automatic braking process is triggered temporarily only if the higher of the reference values is exceeded, i.e. only if a part of the entire triggering condition is fulfilled. The higher reference value is assigned to one pressure sensor and the lower reference value is assigned to the other pressure sensor. The pressure signals of different brake circuits assigned with different reference values are evaluated. A temporary triggering is thereby provided. As seen in Sketch C below, the present invention provides two different reference values for temporary activation of automatic braking for a limited time period.

BEST AVAILABLE COPY

Serial No. 10/019,486
Amendment Dated:
Reply to Office Action



Accordingly, the rejection does not set forth a prima facie case of obviousness. Early and favorable action is therefore earnestly solicited.

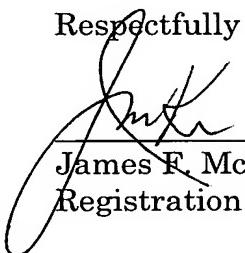
If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Serial No. 10/019,486
Amendment Dated:
Reply to Office Action

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #225/50783).

Respectfully submitted,

June 8, 2004


James F. McKeown
Registration No. 25,406

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500